

WHAT IS CLAIMED IS:

1. A method of generating a high free energy form of a sample, said method comprising the steps of:

disposing a sample in at least one capillary tube;

solidifying the sample in said at least one capillary tube; and

isolating at least one high free energy form of the sample.

2. The method of claim 1 wherein the solidifying step comprises crystallizing the sample.

3. The method of claim 1 wherein the solidifying step comprises the use of an antisolvent.

4. The method of claim 1 wherein the solidifying step is selected from the group consisting of solvent evaporation, antisolvent addition, gel diffusion, and thin-layer deposition.

5. The method of claim 1, further comprising the step of preparing the sample from a supersaturated solution of at least one compound.

6. The method of claim 1, wherein said isolated high free energy form is stabilized within the capillary tube.

7. The method of claim 6, wherein said isolated high free energy form is stable within the capillary tube for at least 24 hours.

8. The method of claim 1, further comprising the step of stabilizing the high free energy form.

9. The method of claim 8, wherein said stabilizing step consists essentially of maintaining the high free energy form of the sample in the capillary tube.

10. The method of claim 1, further comprising the step of identifying the high free energy form by a method selected from the group consisting of visual analysis, microscopic analysis, thermal analysis, diffraction analysis, and spectroscopic analysis.

11. A method of searching for a high free energy form of a sample comprising the steps of:
disposing a sample in a capillary tube;
solidifying the sample in the capillary tube; and
determining whether a high free energy form of the sample is in the capillary tube.

12. The method of claim 11, wherein the sample is placed in at least five capillary tubes.

13. The method of claim 11, wherein the sample is placed in at least 10 capillary tubes.

14. The method of claim 11, wherein the sample is placed in at least two sets of capillary tubes, and at least one set differs from at least one other set.

15. The method of claim 14, wherein the capillary tubes of said at least one set have a different inner diameter than the capillary tubes of said at least one other set.

16. The method of claim 14, wherein the sample is placed in at least four sets of capillary tubes, and each set differs from the other set with respect to the size or surface of the capillary tubes within said sets.

17. The method of claim 11, wherein said at least one capillary tube is coated with a substance on the interior of said tube.

18. The method of claim 11, wherein the step of determining whether the high free energy form was generated comprises an analytical method selected from the group consisting of visual

analysis, microscopic analysis, thermal analysis, diffraction analysis, and spectroscopic analysis.

19. The method of claim 18, wherein the step of determining whether the high free energy form was generated consists essentially of visual analysis of said form.

20. The method of claim 18, wherein the step of determining whether the high free energy form was generated comprises generating data indicative of the relative free energy of the generated form and comparing said data to data relating to a known form.